FIG. 1

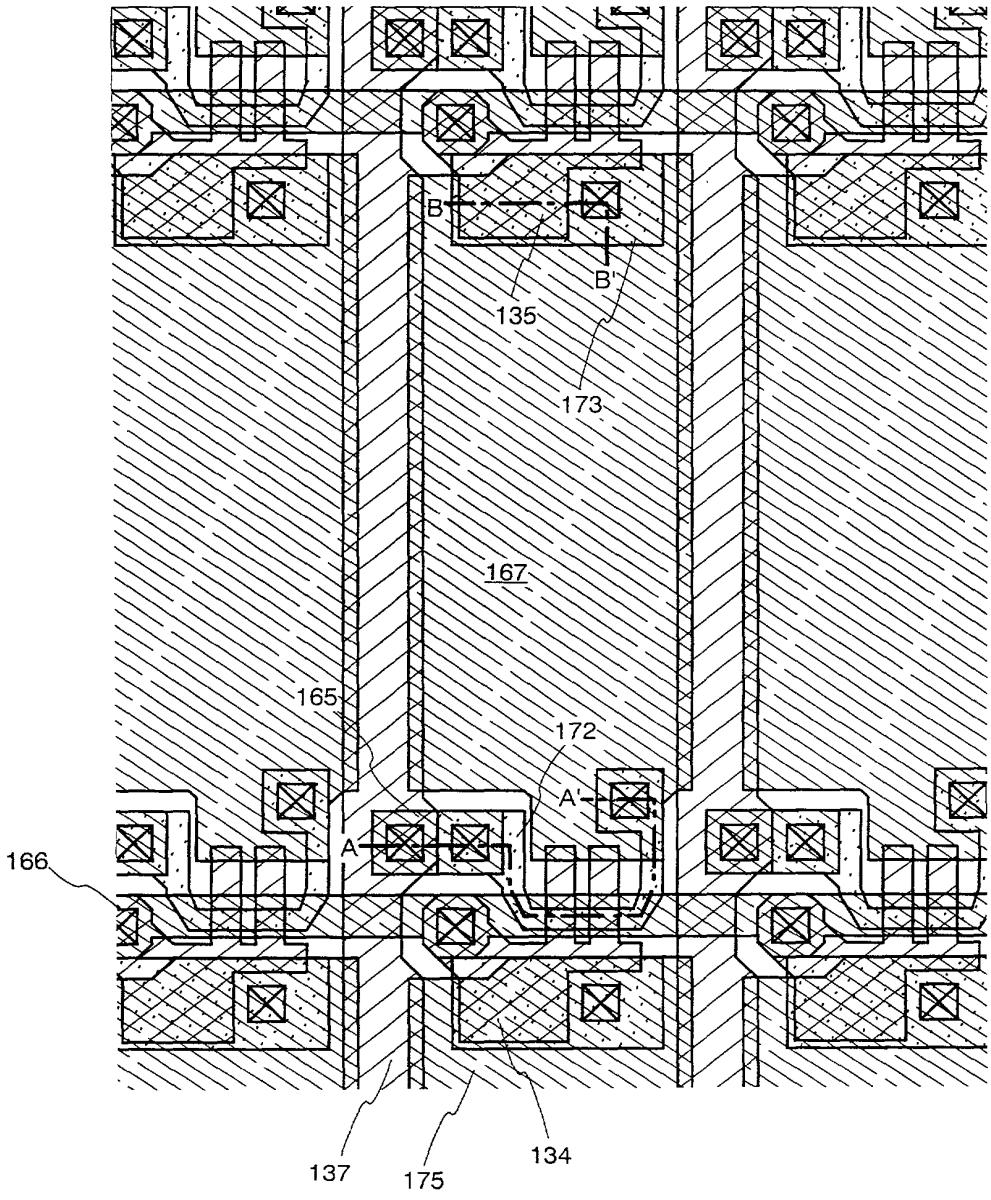


FIG. 2A

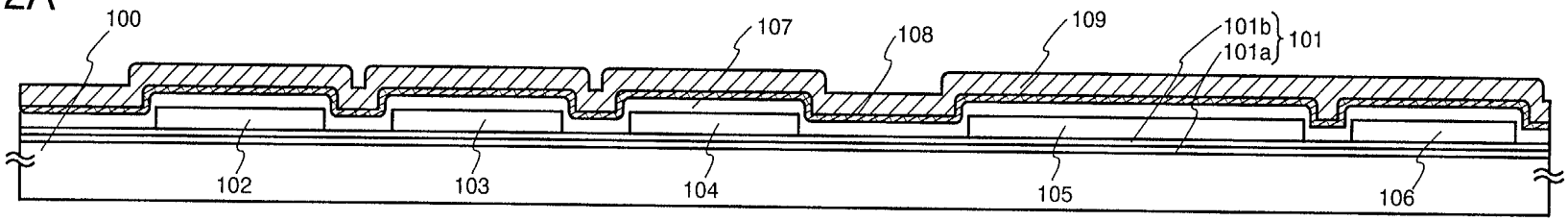


FIG. 2B

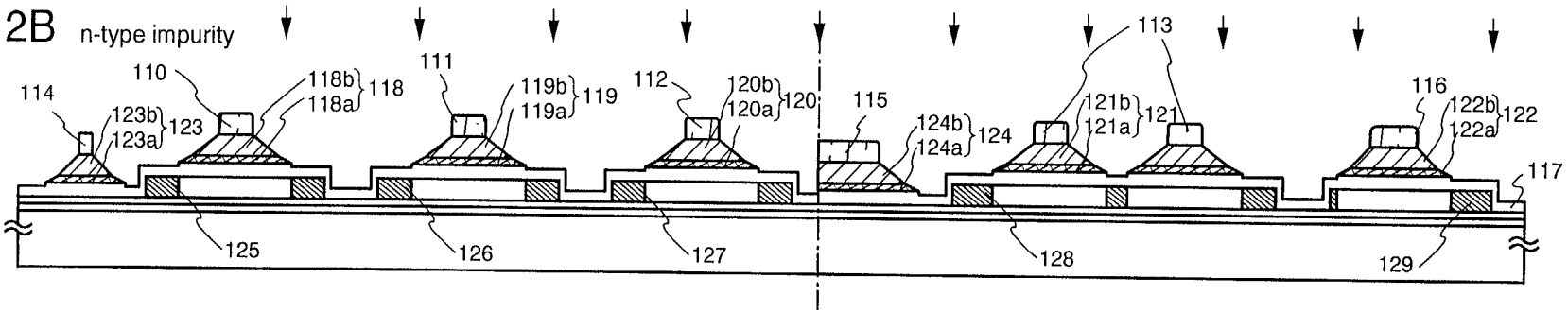


FIG. 2C

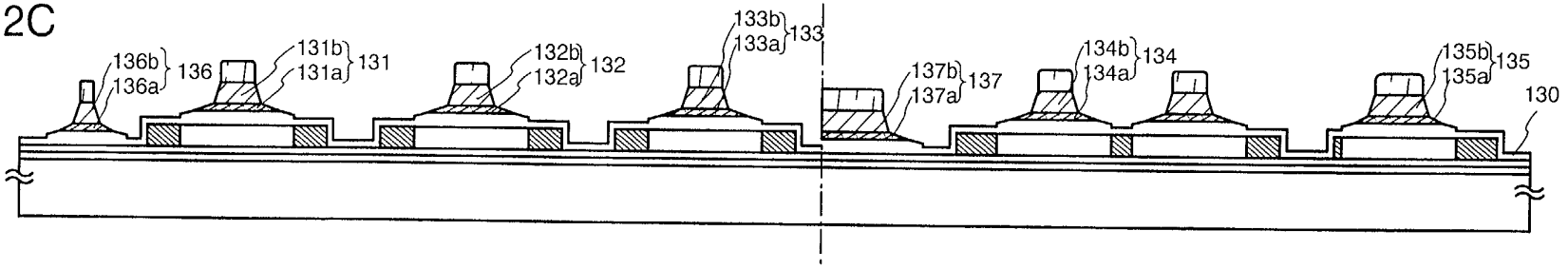


FIG. 3A n-type impurity

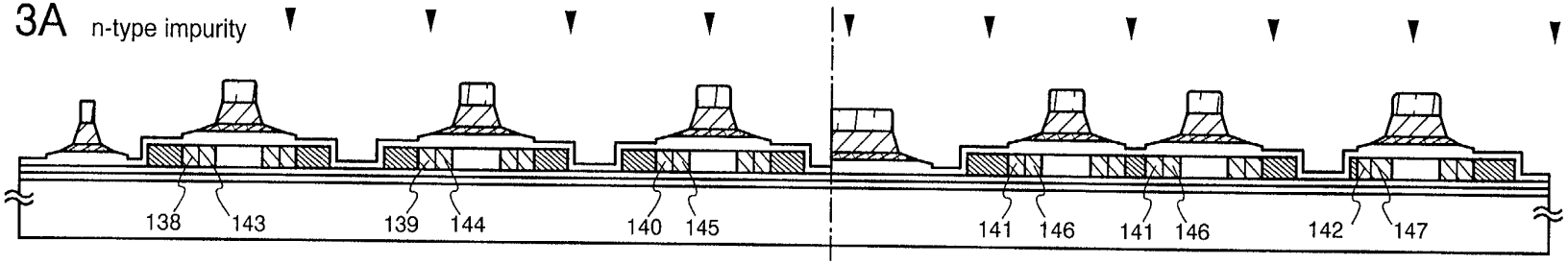


FIG. 3B p-type impurity

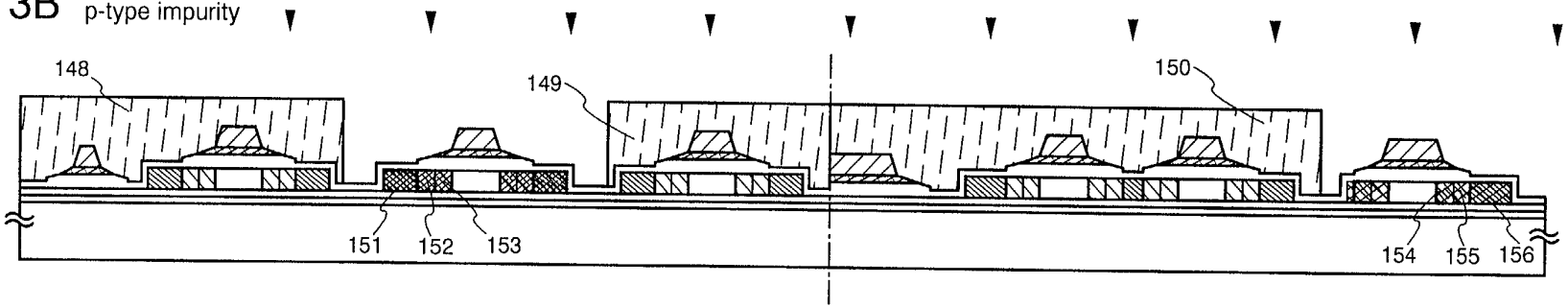


FIG. 3C

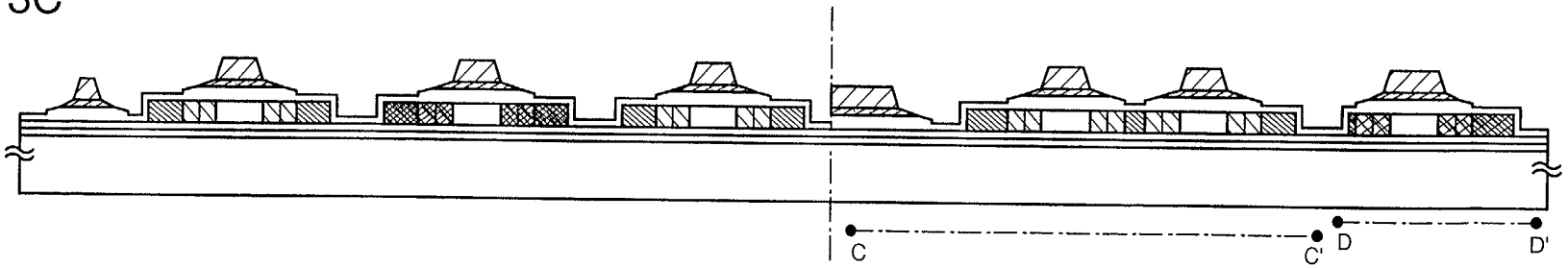
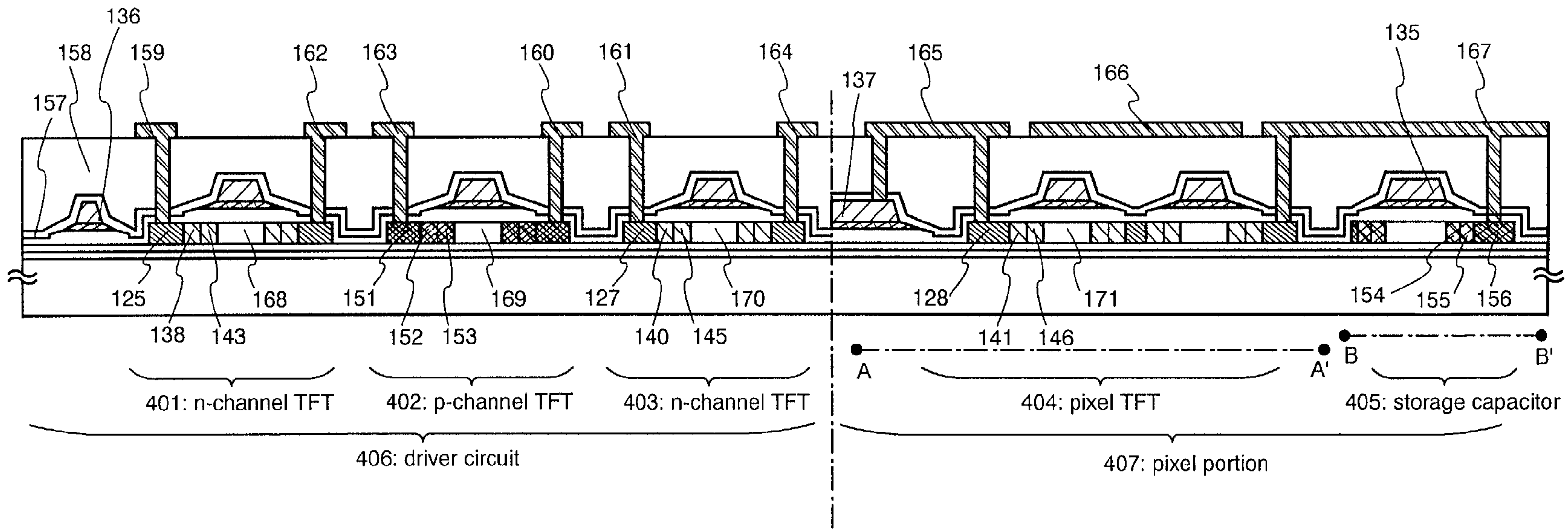


FIG. 4



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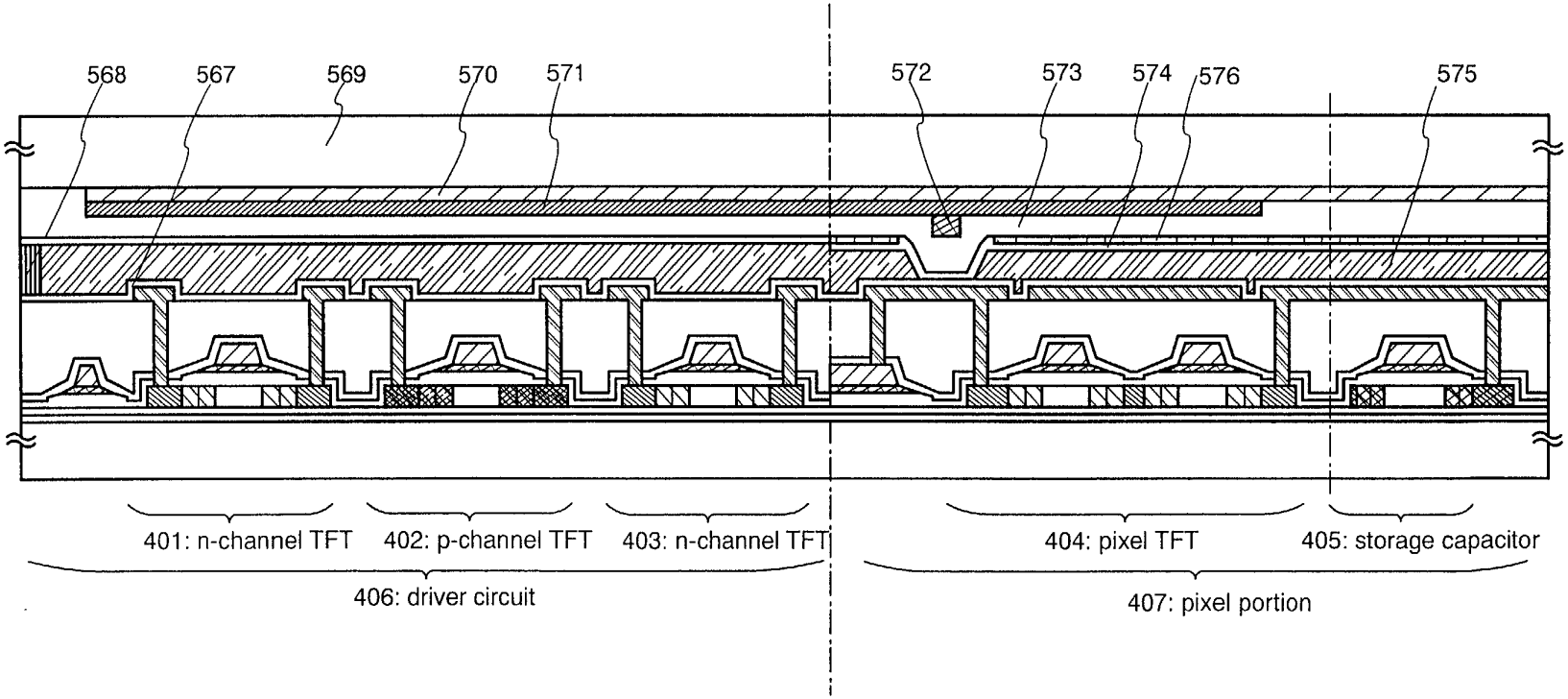
A
A'
B
B'
401: n-channel TFT
402: p-channel TFT
403: n-channel TFT
404: pixel TFT
405: storage capacitor
406: driver circuit
407: pixel portion

FIG. 5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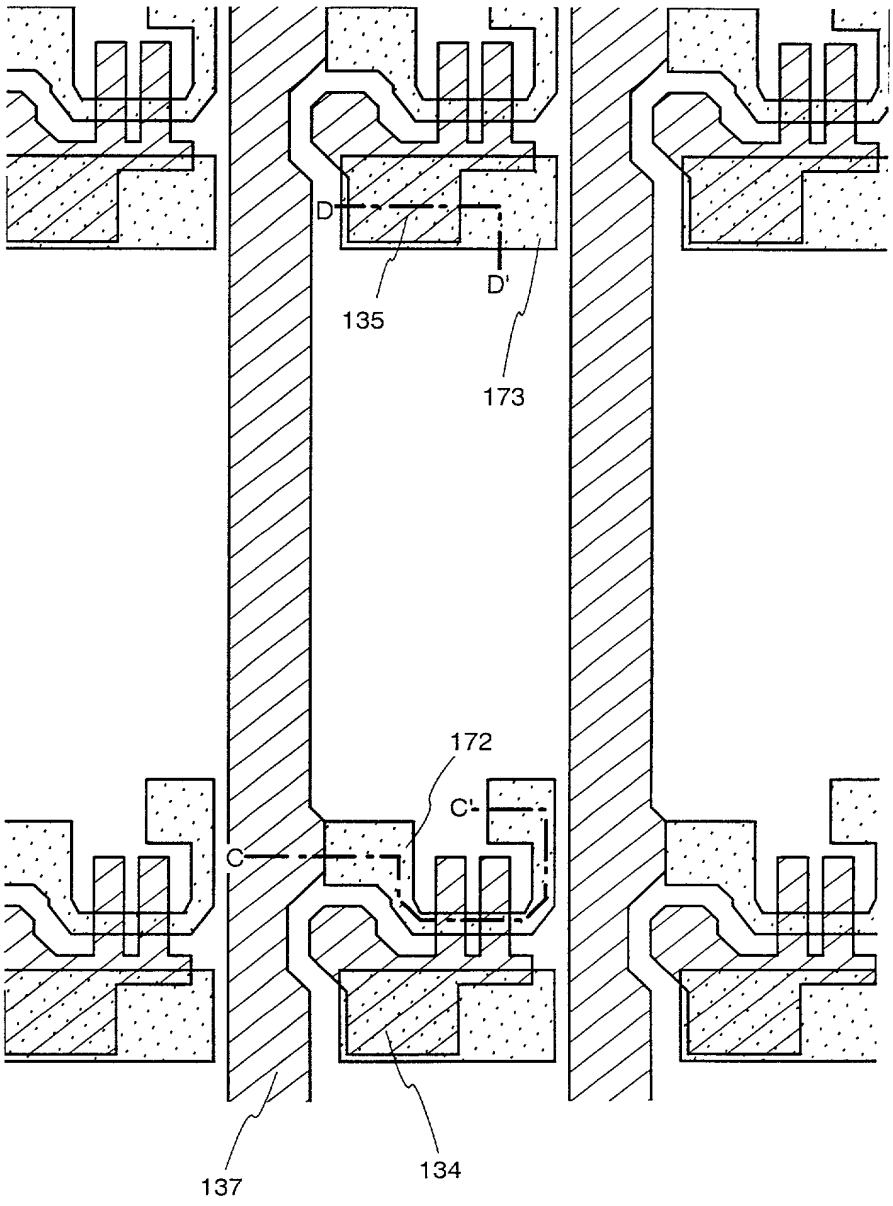
401: n-channel TFT
402: p-channel TFT
403: n-channel TFT
404: pixel TFT
405: storage capacitor
406: driver circuit
407: pixel portion

FIG. 6



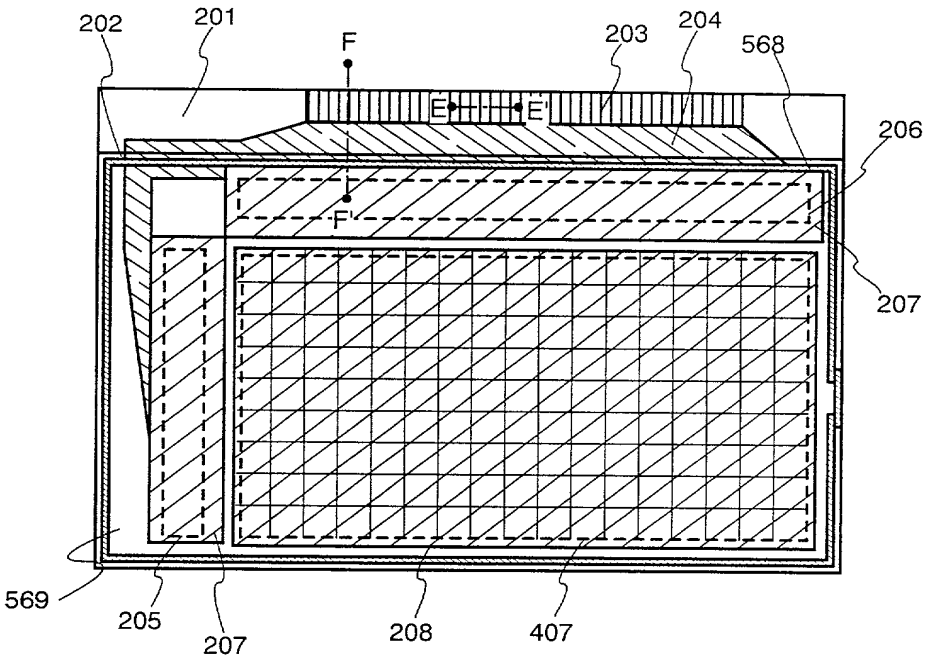


FIG. 7A top view

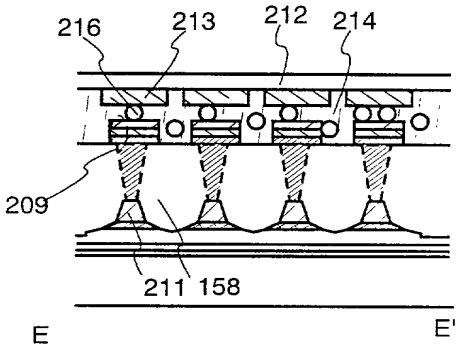


FIG. 7B cross sectional view of E-E'

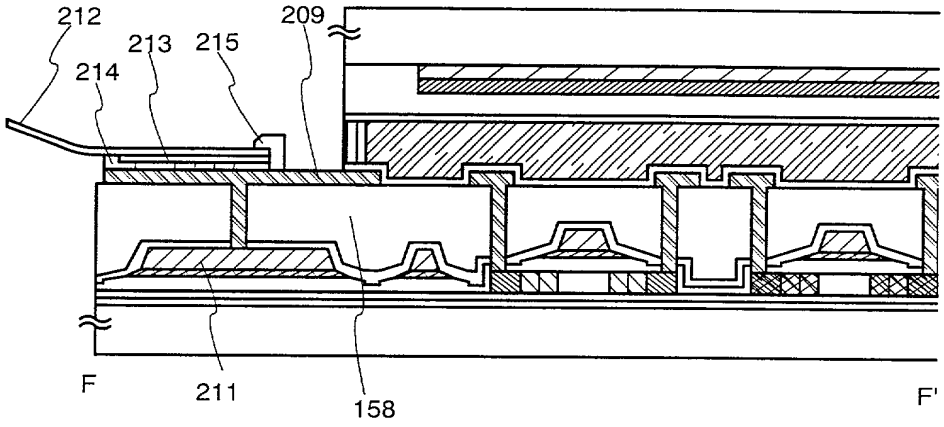


FIG. 8A cross sectional view of F-F'

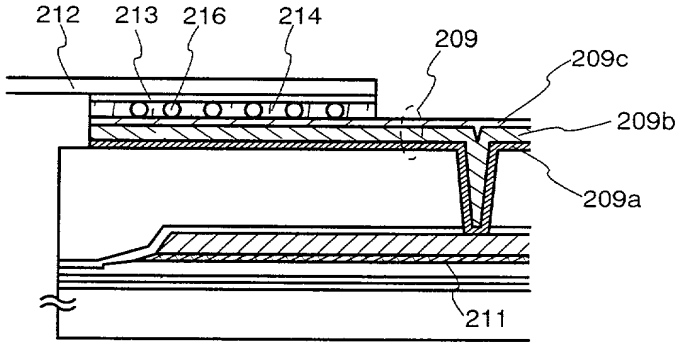


FIG. 8B

FIG. 9A

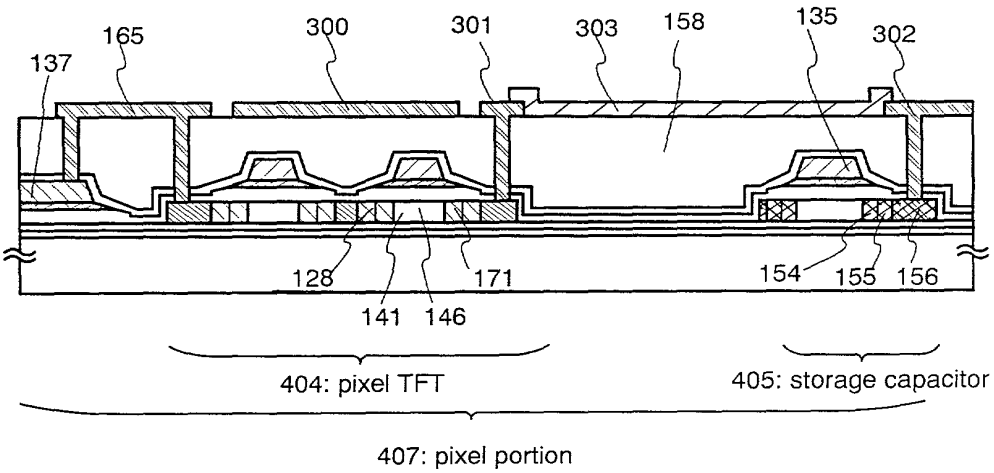


FIG. 9B

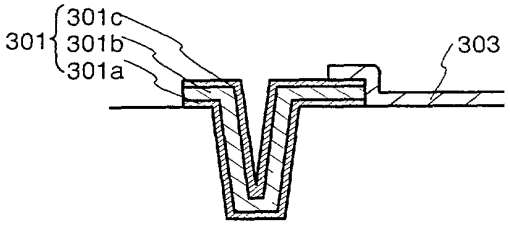


FIG. 9C

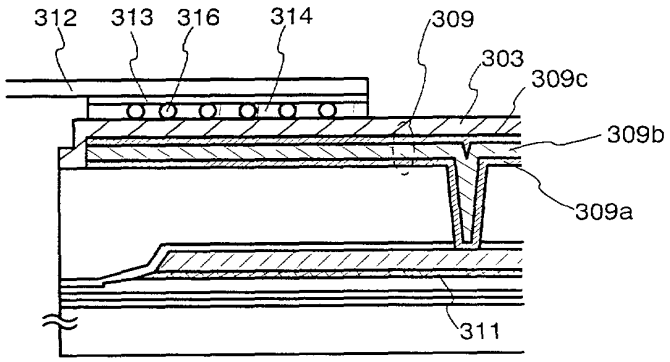


FIG. 10

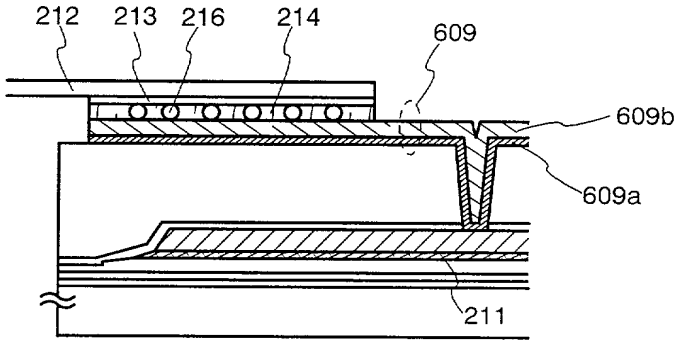
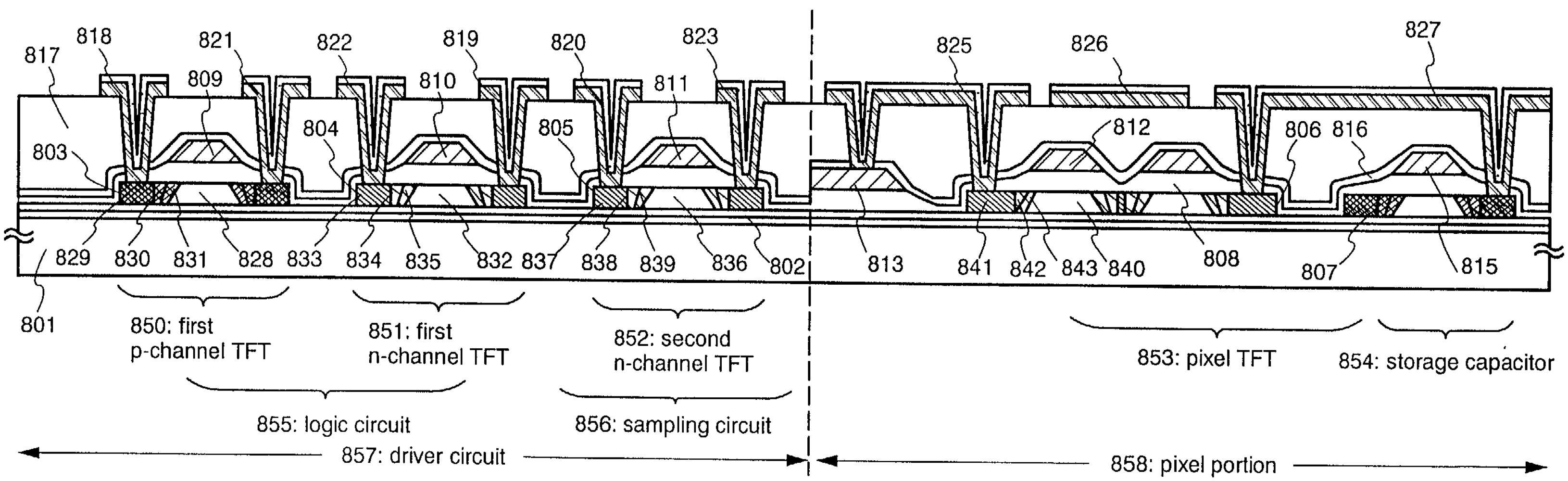


FIG. 11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843
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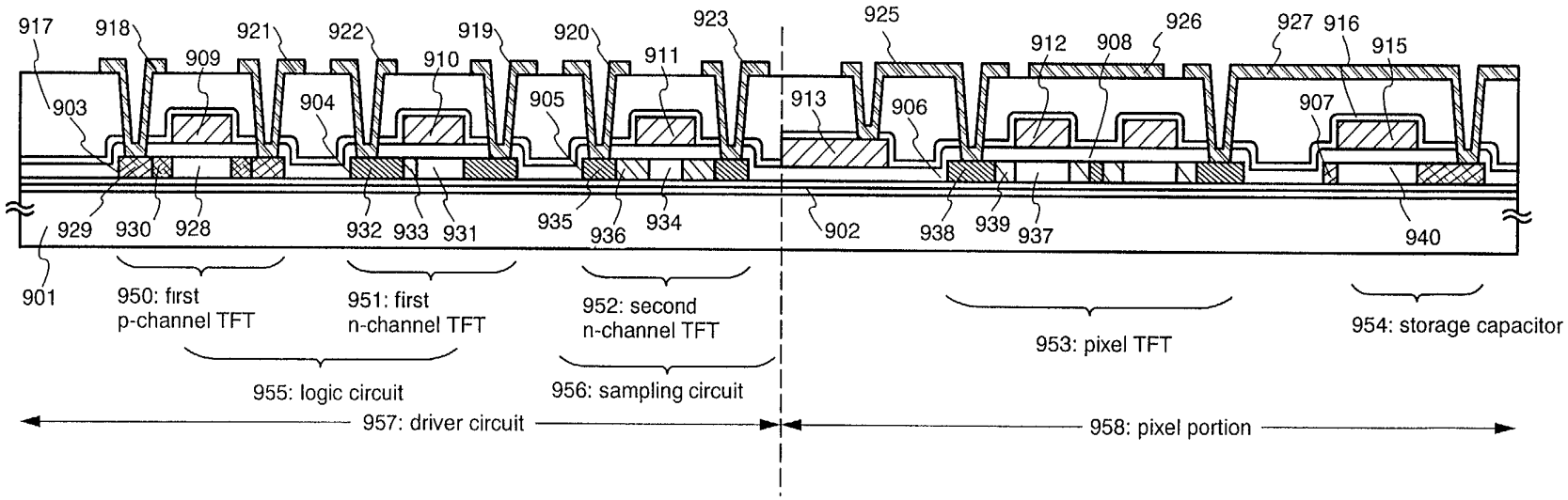
801
850: first p-channel TFT
851: first n-channel TFT
852: second n-channel TFT
853: pixel TFT
854: storage capacitor
855: logic circuit
856: sampling circuit
857: driver circuit
858: pixel portion

FIG. 12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934
902
938
939
937
940
901
950: first p-channel TFT
951: first n-channel TFT
952: second n-channel TFT
953: pixel TFT
954: storage capacitor
955: logic circuit
956: sampling circuit
957: driver circuit
958: pixel portion

FIG. 13

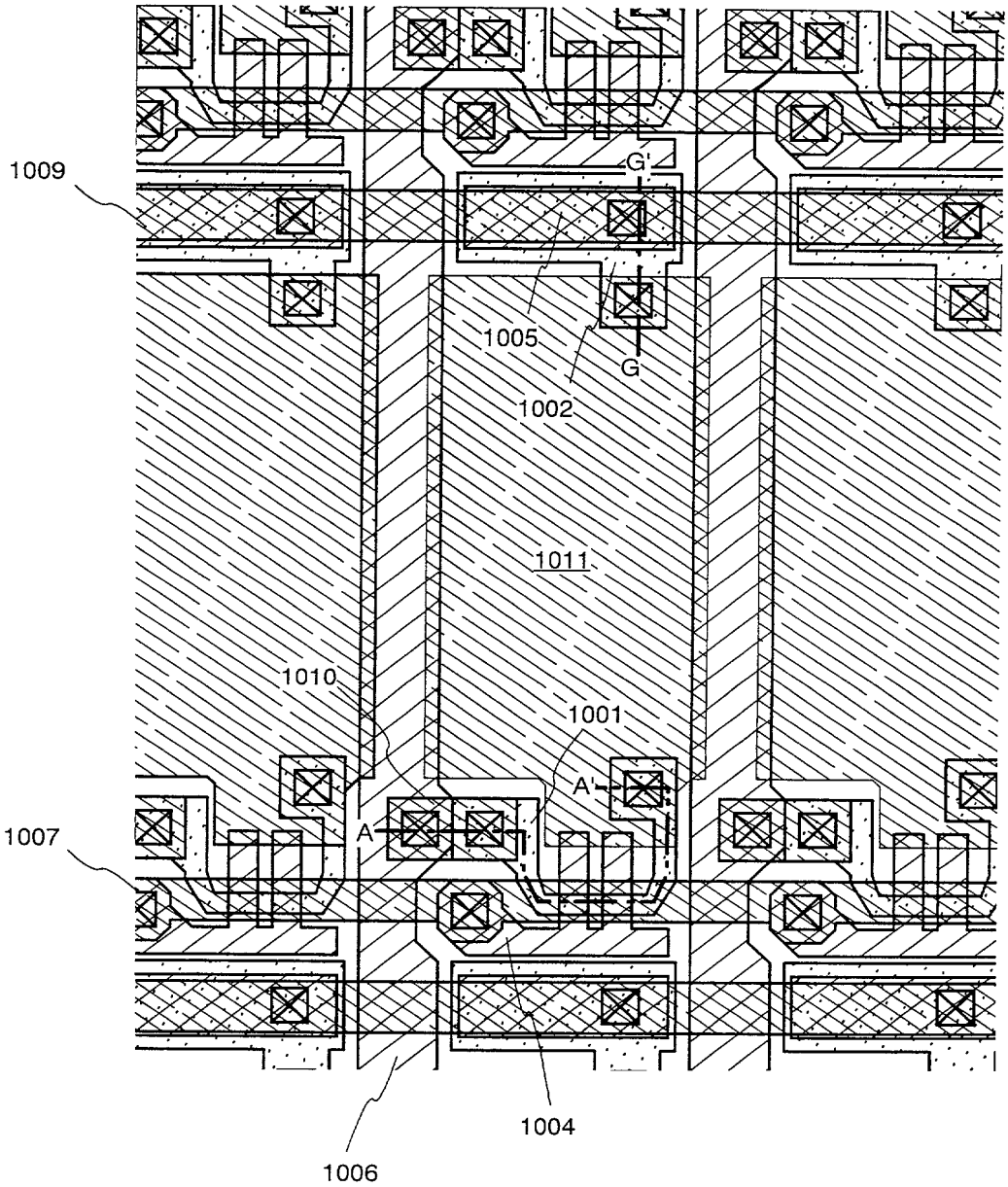


FIG. 14

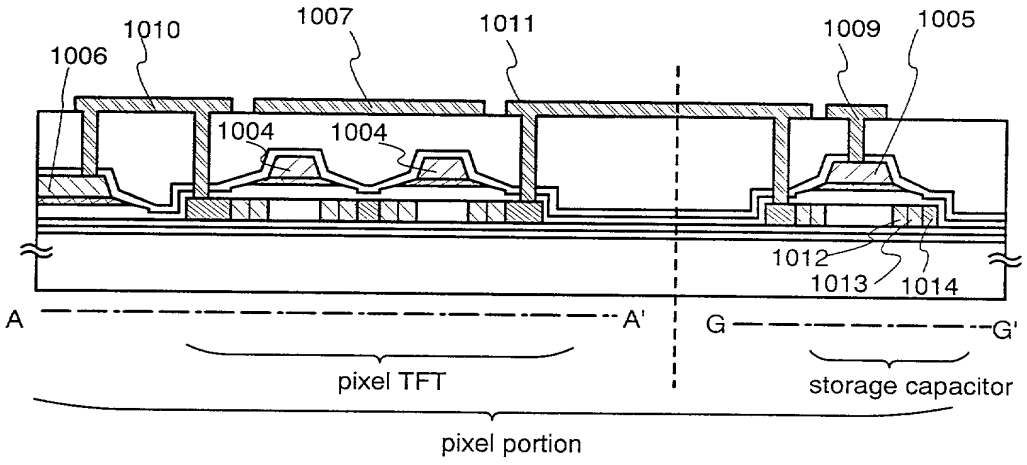

1010
1007
1011
1009
1005
1006
1004
1004
1012
1013
1014
A
A'
G
G'
pixel TFT
storage capacitor
pixel portion

FIG. 15

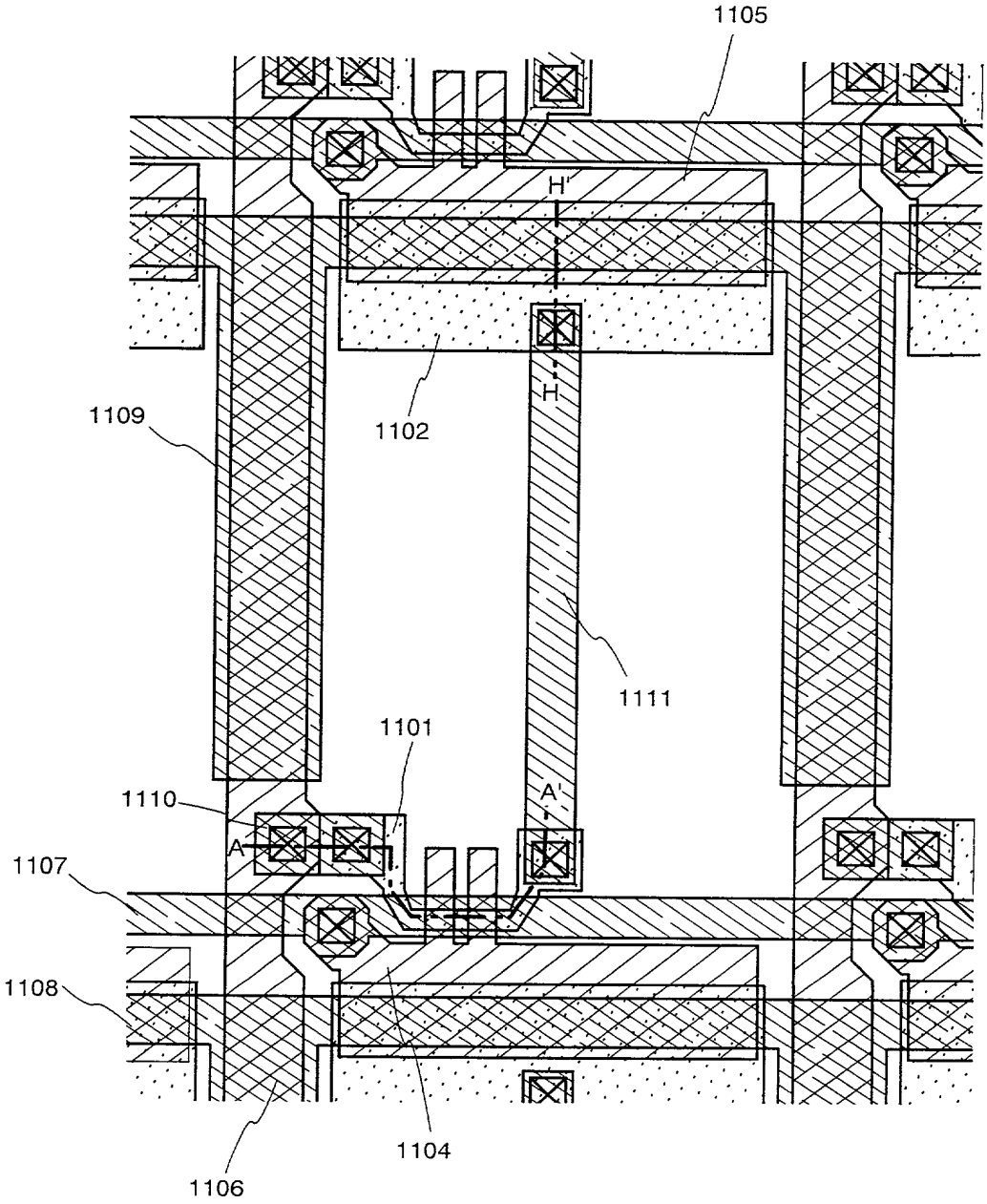


FIG. 16

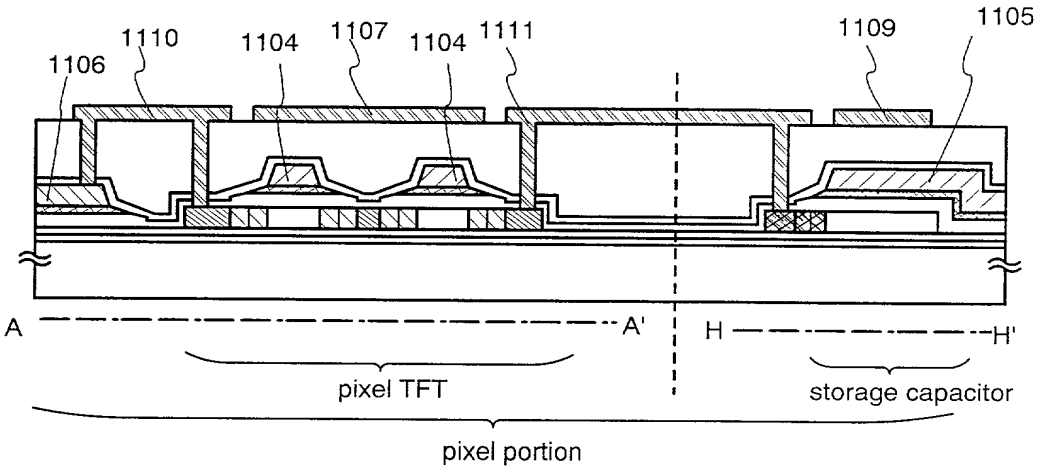

1106
1110
1104
1107
1104
1111
1109
1105
A
A'
H
H'
pixel TFT
storage capacitor
pixel portion

FIG. 17

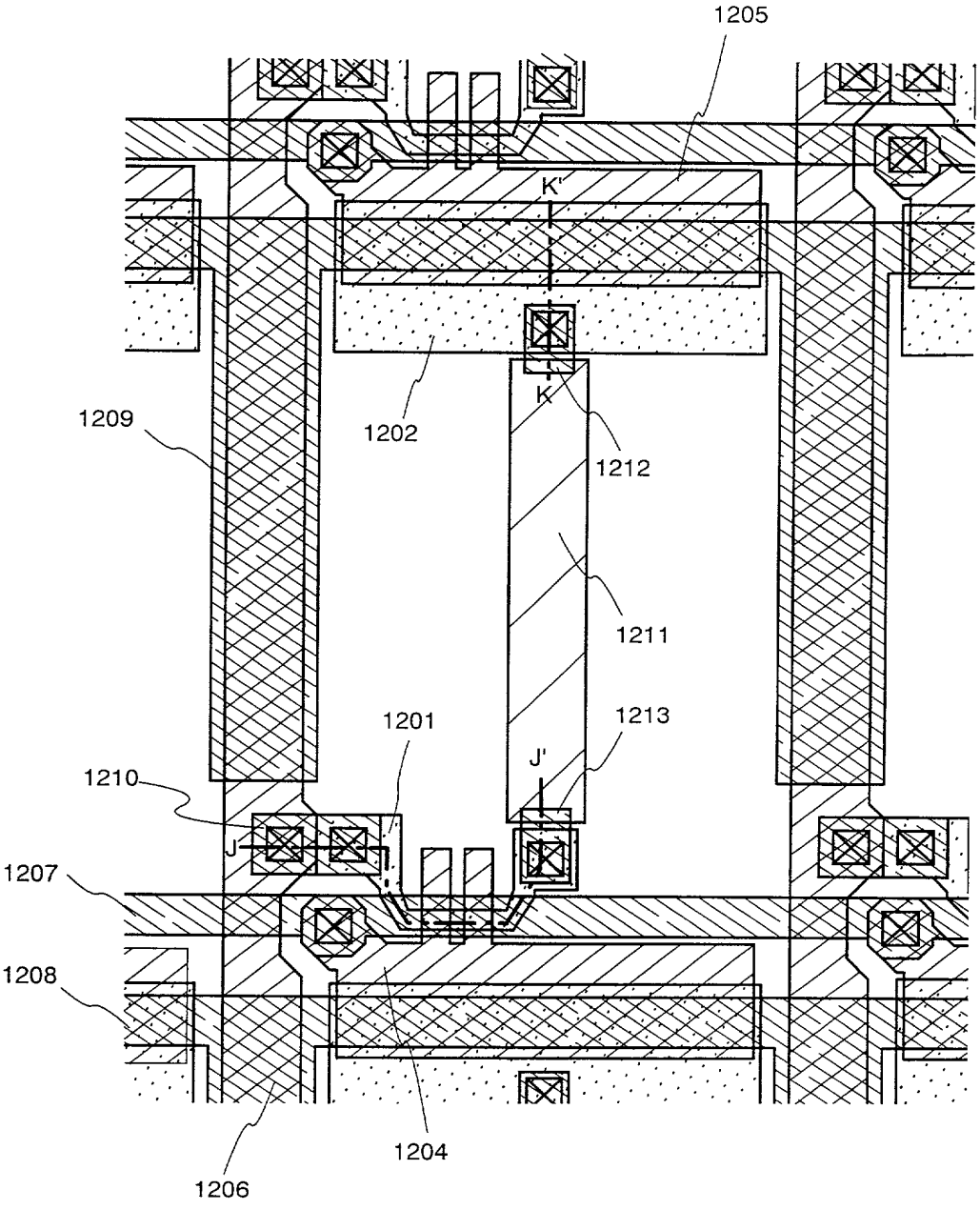

1205
K'
K
1202
1209
1212
1211
1201
1213
J'
1210
J
1207
1208
1204
1206

FIG. 18

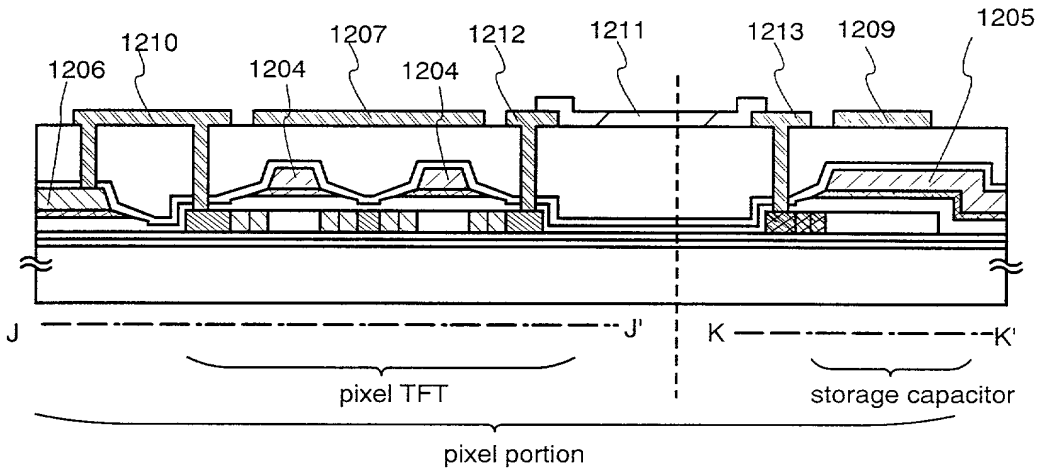
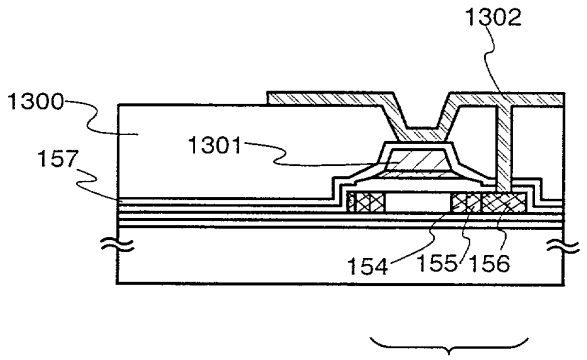

1206
1210
1204
1207
1204
1212
1211
1213
1209
1205
J
J'
K
K'
pixel TFT
storage capacitor
pixel portion

FIG. 19



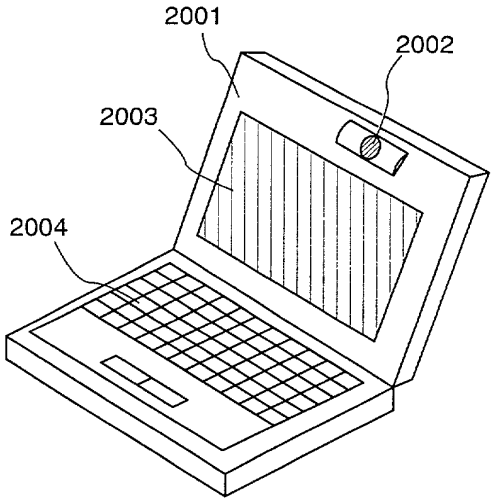


FIG. 20A

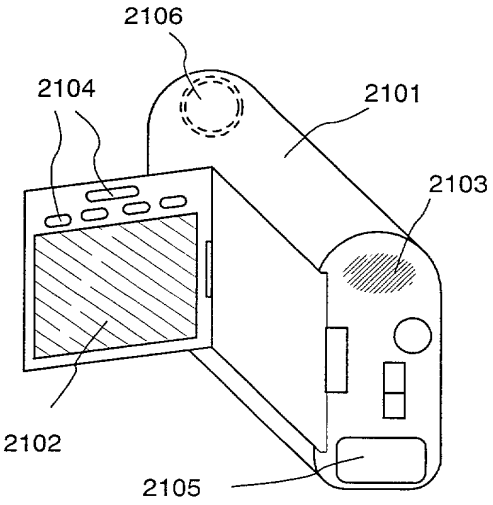


FIG. 20B

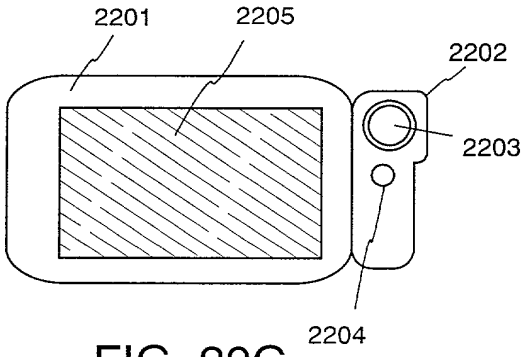


FIG. 20C

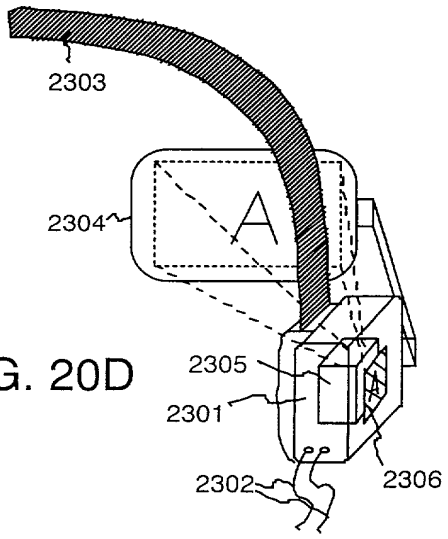


FIG. 20D

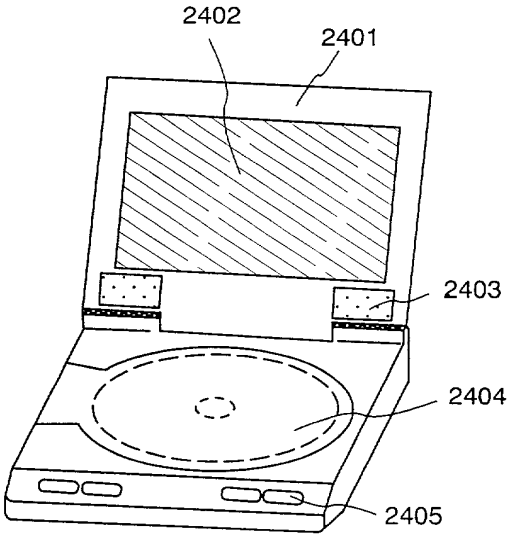


FIG. 20E

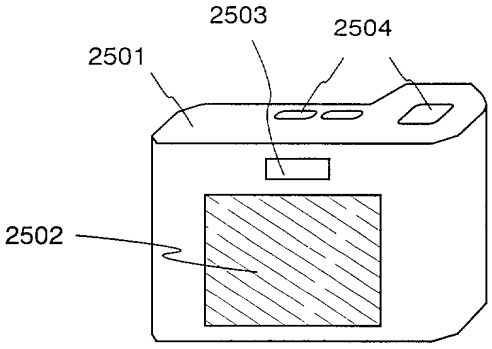


FIG. 20F

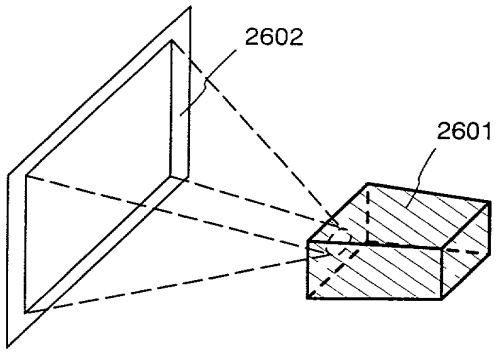


FIG. 21A

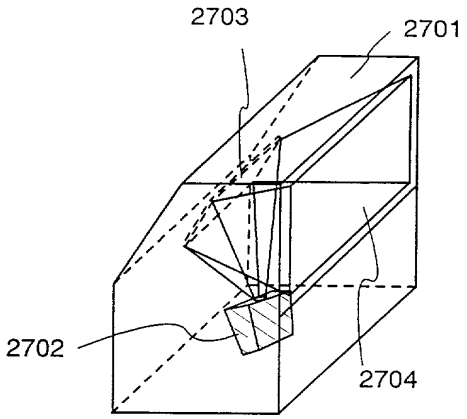


FIG. 21B

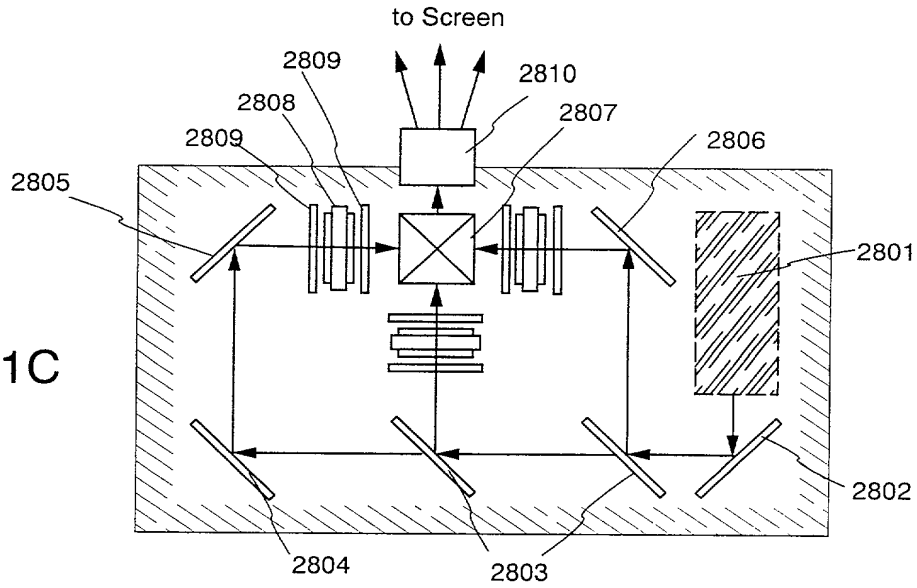


FIG. 21C

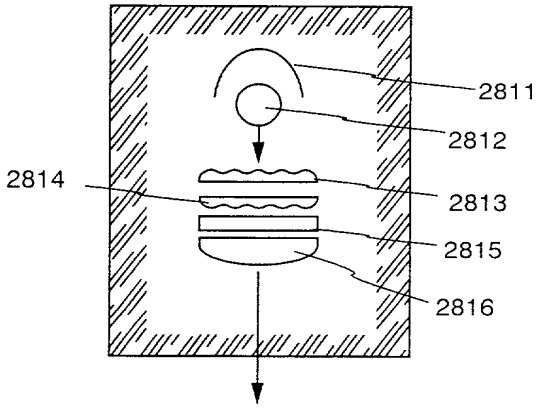


FIG. 21D

FIG. 22A

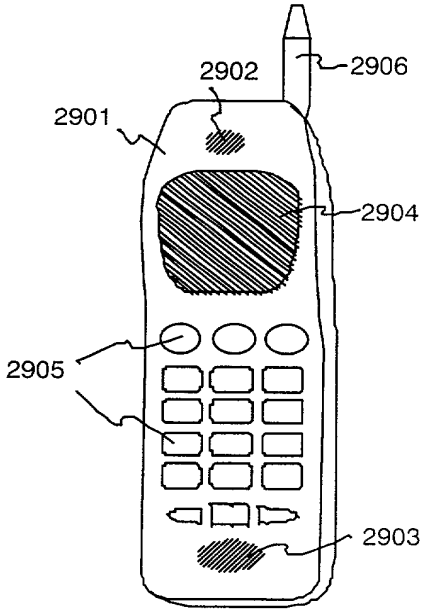


FIG. 22B

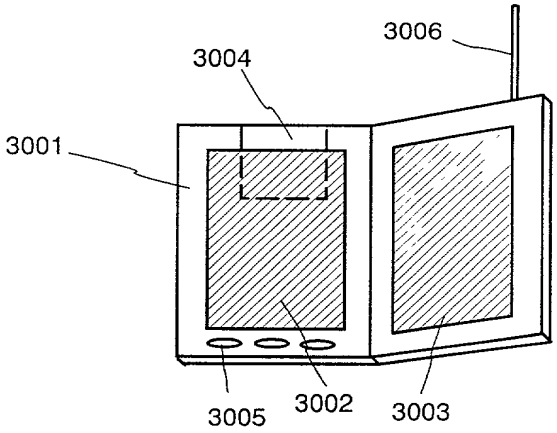


FIG. 22C

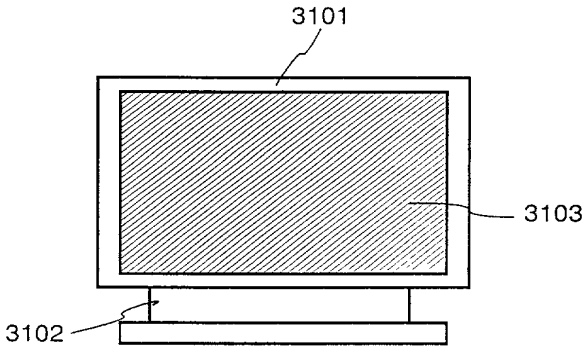


FIG. 23 prior art

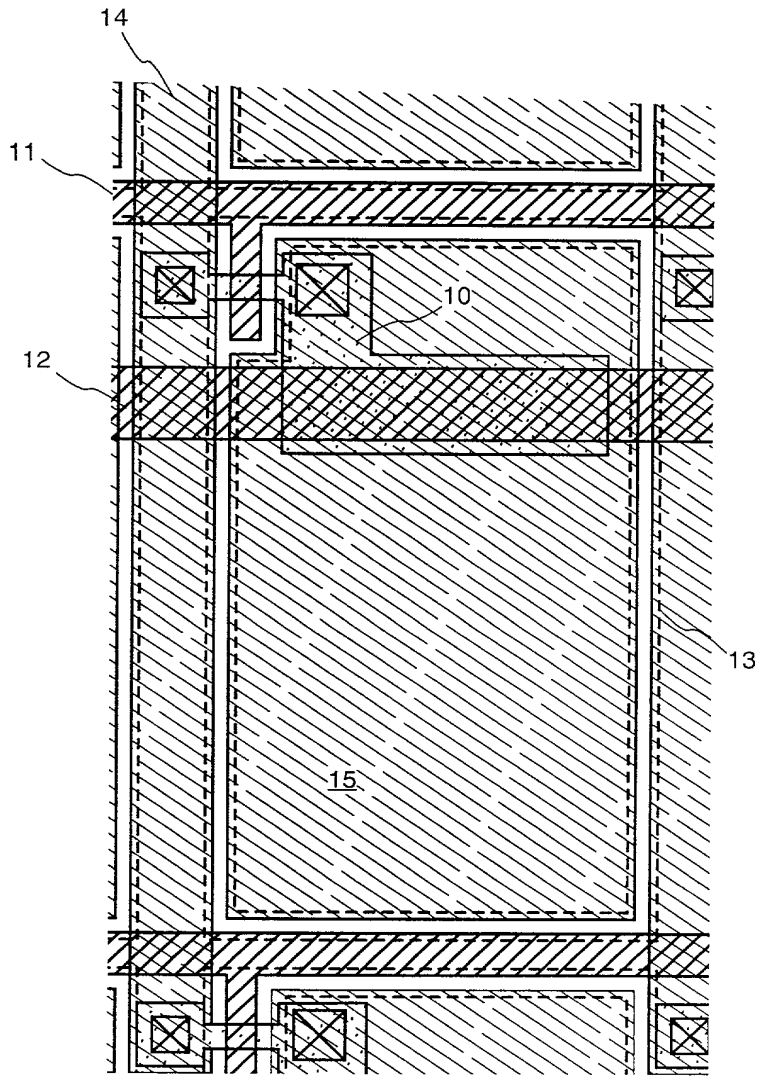


FIG. 24A

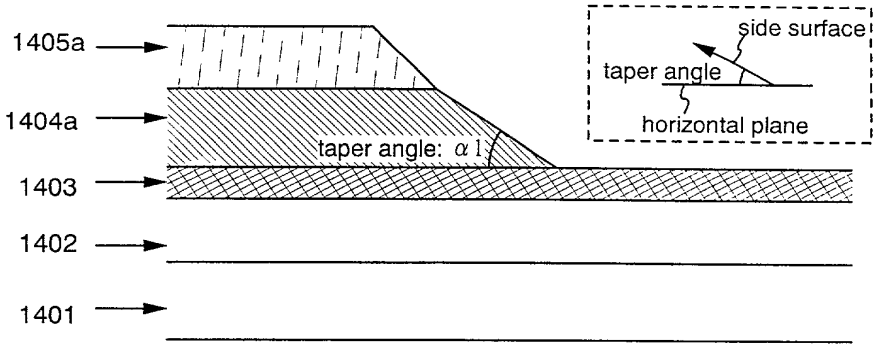


FIG. 24B

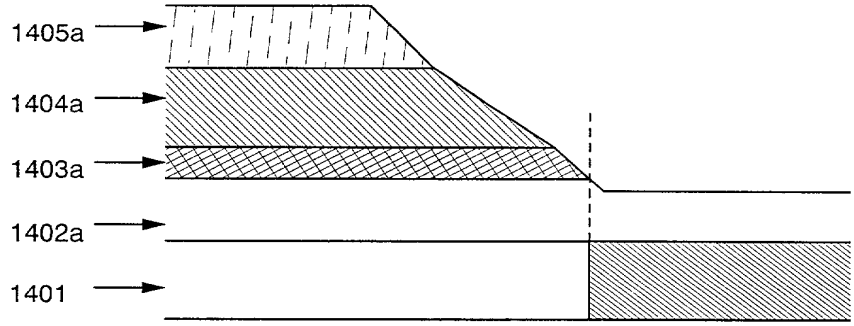


FIG. 24C

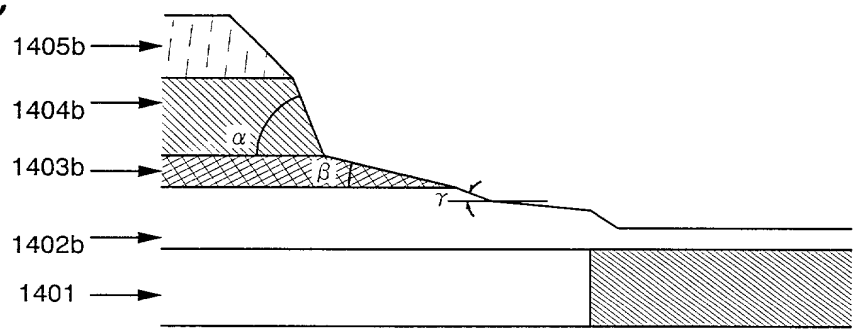


FIG. 24D

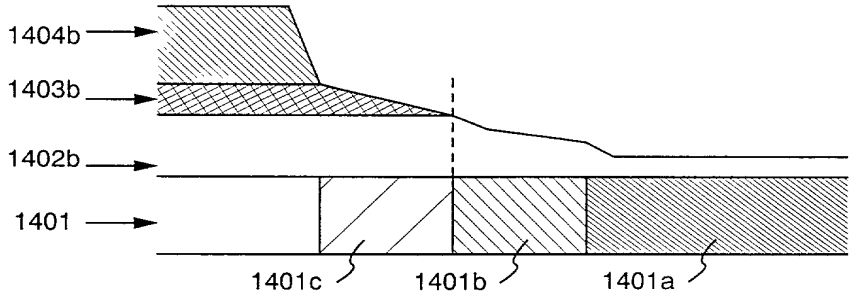


FIG. 25